

ABSTRACT

An improved catheter assembly is provided for advancing a pair of guide wires to a bifurcated vessel in preparation for an interventional procedure. The delivery assembly of the present invention has the novel feature of containing two guide wire lumens in a single catheter to prevent wire wrapping and crossing of the wires. The tracking guide wire lumen and the integrated guide wire lumen run substantially parallel to each other throughout their lengths, and the tracking guide wire lumen and the integrated guide wire lumen do not move apart with respect to each other as the catheter is manipulated. The invention provides for a clip for clipping the wires at their proximal ends outside of the patient, thus helping to prevent wire wrapping, wire crossing, and confusion between wires. The assembly allows for the delivery of two wires to a bifurcation so that the bifurcation is ready for an interventional procedure, such as the implantation of a bifurcated stent.